

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

H40 ADVANCED GREY

Date of first edition: 6/9/2022

Safety Data Sheet dated 09/06/2022

version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: H40 ADVANCED GREY

Trade code: KA0437

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: DZKK_020

Uses advised against: Not available

1.3. Details of the supplier of the safety data sheet

Company: Tilemaster Adhesives Ltd - Kerakoll Group

Tomlinson Road, Leyland, Lancashire, PR25 2DY,

United Kingdom

Tel. 01772 456831

safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112

Ireland Poison information centre: 01 809 2166 (Daily 8am-10pm) In case of emergency call 999 or 112

Malta In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

0 The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: H40 ADVANCED GREY

Hazardous components within the meaning of the CLP regulation and related classification:

None

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

N.A.

4.3. Indication of any immediate medical attention and special treatment needed

N.A.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

| Component | OEL Type | Country | Ceiling | Long Term mg/m3 | Long Term ppm | Short Term mg/m3 | Short Term ppm | Behaviour | Notes |
|-----------------------------------|--------------|--------------------------|---------|-----------------|---------------|------------------|----------------|---------------------|---|
| Quartz | NATIONAL | AUSTRALIA | | 0.100 | | | | | Respirable fraction |
| | NATIONAL | AUSTRIA | | 0.150 | | | | | Respirable aerosol |
| | NATIONAL | BELGIUM | | 0.100 | | | | | |
| | NATIONAL | CANADA | | 0.100 | | | | | Canada Ontario; Respirable aerosol |
| | NATIONAL | CANADA | | 0.100 | | | | | Canada Quebec |
| | NATIONAL | DENMARK | | 0.300 | | | 0.600 | | Inhalable aerosol |
| | NATIONAL | DENMARK | | 0.100 | | | 0.200 | | Respirable aerosol |
| | NATIONAL | FINLAND | | 0.050 | | | | | Respirable fraction |
| | NATIONAL | FRANCE | | 0.100 | | | | | Respirable aerosol |
| | NATIONAL | HUNGARY | | 0.150 | | | | | Respirable aerosol |
| | NATIONAL | IRELAND | | 0.100 | | | | | Respirable fraction |
| | NATIONAL | NEW ZEALAND | | 0.200 | | | | | Respirable aerosol |
| | NATIONAL | CHINA | | 1.000 | | | | | Inhalable fraction. 10% <= free SiO2 <= 50%. |
| | NATIONAL | CHINA | | 0.700 | | | | | Inhalable fraction. 50% < free SiO2 <= 80%. |
| | NATIONAL | CHINA | | 0.500 | | | | | Inhalable fraction. Free SiO2 < 80%. |
| | NATIONAL | SINGAPORE | | 0.100 | | | | | Respirable aerosol. |
| | NATIONAL | SPAIN | | 0.100 | | | | | Respirable fraction |
| | NATIONAL | SWEDEN | | 0.100 | | | | | Respirable aerosol |
| | NATIONAL | SWITZERLAND | | 0.150 | | | | | Respirable aerosol |
| | NATIONAL | NETHERLANDS | | 0.075 | | | | | Respirable dust |
| | NATIONAL | ITALY | | 0.050 | | | | | Silice cristallina |
| | NATIONAL | ITALY | | 0.025 | | | | | A2 |
| | NATIONAL | ITALY | | 10.000 | | | | | Come particelle non altrimenti specificate PNOC |
| | NATIONAL | KOREA, REPUBLIC OF | | 0.050 | | | | | |
| | NATIONAL | UNITED STATES OF AMERICA | | 0.050 | | | | | NIOSH |
| | NATIONAL | ARGENTINA | | 0.050 | | | | | |
| | NATIONAL | CHILE | | 0.080 | | | | | |
| | NATIONAL | CROATIA | | 0.100 | | | | | |
| | NATIONAL | ESTONIA | | 0.100 | | | | | |
| | NATIONAL | INDIA | | 10.000 | | | | | |
| | NATIONAL | LITHUANIA | | 0.100 | | | | | |
| | NATIONAL | MALAYSIA | | 0.100 | | | | | |
| | NATIONAL | MEXICO | | 0.025 | | | | | Respirable fraction |
| NATIONAL | NORWAY | | 0.300 | | | | | Total dust | |
| NATIONAL | NORWAY | | 0.100 | | | | | Respirable dust | |
| NATIONAL | PORTUGAL | | 0.025 | | | | | Respirable fraction | |
| NATIONAL | SLOVENIA | | 0.050 | | 0.400 | | | | |
| NATIONAL | SOUTH AFRICA | | 0.100 | | | | | | |
| ACGIH | NNN | | 0.025 | | | | | | (R), A2 - Pulm fibrosis, lung cancer |
| Plaster of Paris (Ca(SO4).1/2H2O) | NATIONAL | CANADA | | 10.000 | | | | | Québec; total |

| | | | | |
|-----------|----------|---|--------|--|
| | NATIONAL | CANADA | 5.000 | Québec; respirable |
| | NATIONAL | IRELAND | 10.000 | Inhalable fraction |
| | NATIONAL | IRELAND | 4.000 | Respirable fraction |
| | NATIONAL | KOREA, REPUBLIC OF | 10.000 | |
| | NATIONAL | UNITED STATES OF AMERICA | 10.000 | NIOSH; Total dust |
| | NATIONAL | UNITED STATES OF AMERICA | 5.000 | NIOSH; respirable fraction |
| | NATIONAL | UNITED STATES OF AMERICA | 15.000 | OSHA; total dust |
| | NATIONAL | UNITED STATES OF AMERICA | 5.000 | OSHA; respirable fraction |
| | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 10.000 | inhalable aerosol |
| | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 4.000 | Respirable aerosol |
| Limestone | NATIONAL | BELGIUM | 10.000 | |
| | NATIONAL | HUNGARY | 10.000 | Inhalable aerosol |
| | NATIONAL | CHINA | 8.000 | Inhalable fraction |
| | NATIONAL | CHINA | 4.000 | Inhalable aerosol |
| | NATIONAL | KOREA, REPUBLIC OF | 10.000 | |
| | NATIONAL | JAPAN | 2.000 | Respirable dust |
| | NATIONAL | JAPAN | 8.000 | Total dust: Total dust comprises particles with a flow speed of 50 to 80 cm/sec at the entry of a particle sampler |
| | NATIONAL | SPAIN | 10.000 | Inhalable aerosol |
| | NATIONAL | SWITZERLAND | 3.000 | Respirable aerosol |
| | NATIONAL | UNITED STATES OF AMERICA | 15.000 | OSHA: Total dust |
| | NATIONAL | UNITED STATES OF AMERICA | 5.000 | OSHA: Respirable dust |
| | NATIONAL | UNITED STATES OF AMERICA | 10.000 | NIOSH: total dust, calcium carbonate |
| | NATIONAL | UNITED STATES OF AMERICA | 5.000 | NIOSH: Respirable aerosol, calcium carbonate |
| | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 10.000 | Inhalable aerosol |
| | NATIONAL | UNITED | 4.000 | Respirable aerosol |

| | | | | |
|----------|--|--------|--------|--|
| | KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | | | |
| NATIONAL | ITALY | 10.000 | | Come particelle non altrimenti specificate PNOC |
| NATIONAL | CROATIA | 10.000 | | |
| NATIONAL | FRANCE | 10.000 | | |
| NATIONAL | NETHERLANDS | 10.000 | | |
| NATIONAL | PORTUGAL | 10.000 | | |
| NATIONAL | AUSTRALIA | 10.000 | | This value is for inhalable dust containing no asbestos and < 1% crystalline silica |
| NATIONAL | BELGIUM | 10.000 | | |
| NATIONAL | CANADA | 10.000 | | Ontario |
| NATIONAL | CANADA | 10.000 | | Quebec |
| NATIONAL | DENMARK | 6.000 | 12.000 | Long term and short term: total dust |
| NATIONAL | FRANCE | 11.000 | | Inhalable aerosol |
| NATIONAL | GERMANY | 0.300 | 2.400 | DFG; Long term and short term: excluding ultrafine particles; respirable fraction; multiplied by the material density; |
| NATIONAL | IRELAND | 10.000 | | Inhalable fraction |
| NATIONAL | IRELAND | 8.000 | | Respirable fraction |
| NATIONAL | JAPAN | 0.300 | | JSOH; Nanoparticle, as Ti |
| NATIONAL | LATVIA | 10.000 | | |
| NATIONAL | NEW ZEALAND | 10.000 | | The value for inhalable dust containing no asbestos and less than 1% free silica |
| NATIONAL | CHINA | 8.000 | | Inhalable fraction |
| NATIONAL | POLAND | 10.000 | 30.000 | |
| NATIONAL | ROMANIA | 10.000 | 15.000 | |
| NATIONAL | SINGAPORE | 10.000 | | |
| NATIONAL | KOREA, REPUBLIC OF | 10.000 | | |
| NATIONAL | SPAIN | 10.000 | | Inhalable aerosol |
| NATIONAL | SWEDEN | 5.000 | | Inhalable aerosol |
| NATIONAL | SWITZERLAND | 3.000 | | Respirable aerosol |
| NATIONAL | UNITED STATES OF AMERICA | 15.000 | | OSHA; total dust |
| NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 10.000 | | Inhalable aerosol |
| NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 4.000 | | Respirable aerosol |
| NATIONAL | ITALY | 10.000 | | |
| NATIONAL | ARGENTINA | 10.000 | | |
| NATIONAL | AUSTRIA | 5.000 | 10.000 | |
| NATIONAL | BULGARIA | 10.000 | | |

| | | | | | |
|----------|---|--------|--------|--|---|
| NATIONAL | CROATIA | 10.000 | | | Total dust |
| NATIONAL | CROATIA | 4.000 | | | Respirable dust |
| NATIONAL | ESTONIA | 5.000 | | | |
| NATIONAL | GREECE | 10.000 | | | |
| NATIONAL | GREECE | 5.000 | | | |
| NATIONAL | INDONESIA | 10.000 | | | |
| NATIONAL | LITHUANIA | 5.000 | | | |
| NATIONAL | MALAYSIA | 10.000 | | | |
| NATIONAL | MEXICO | 10.000 | | | |
| NATIONAL | NORWAY | 5.000 | | | |
| NATIONAL | PORTUGAL | 10.000 | | | |
| NATIONAL | RUSSIAN FEDERATION | 10.000 | | | |
| NATIONAL | SLOVAKIA | 5.000 | | | |
| NATIONAL | SLOVENIA | 6.000 | | | |
| NATIONAL | SOUTH AFRICA | 10.000 | | | Inhalable particulate |
| NATIONAL | SOUTH AFRICA | 5.000 | | | Respirable particulate |
| NATIONAL | TAIWAN, PROVINCE OF CHINA | 10.000 | | | |
| ACGIH | NNN | 10 | | | A4 - LRT irr |
| NATIONAL | AUSTRALIA | 5.000 | | | |
| NATIONAL | AUSTRIA | 5.000 | 10.000 | | long term and short term: respirable aerosol |
| NATIONAL | BELGIUM | 5.000 | 2.000 | | |
| NATIONAL | CANADA | 5.000 | | | Ontario; respirable aerosol |
| NATIONAL | CANADA | 5.000 | | | Québec |
| NATIONAL | DENMARK | 3.500 | 7.000 | | |
| NATIONAL | FINLAND | 5.000 | | | Calculated as Fe; fume |
| NATIONAL | HUNGARY | 6.000 | | | Respirable aerosol |
| NATIONAL | IRELAND | 5.000 | 10.000 | | |
| NATIONAL | NEW ZEALAND | 5.000 | | | |
| NATIONAL | POLAND | 5.000 | 10.000 | | |
| NATIONAL | ROMANIA | 5.000 | 10.000 | | |
| NATIONAL | SINGAPORE | 5.000 | | | |
| NATIONAL | KOREA, REPUBLIC OF | 5.000 | | | |
| NATIONAL | SPAIN | 5.000 | | | |
| NATIONAL | SWEDEN | 3.500 | | | |
| NATIONAL | SWITZERLAND | 3.000 | | | Respirable aerosol |
| NATIONAL | UNITED STATES OF AMERICA | 5.000 | | | NIOSH; AS Fe, total particulate |
| NATIONAL | UNITED STATES OF AMERICA | 10.000 | | | OSHA |
| NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | 5.000 | 10.000 | | |
| NATIONAL | ITALY | 5.000 | | | |
| NATIONAL | ARGENTINA | 5.000 | | | |
| NATIONAL | BULGARIA | 5.000 | | | |
| NATIONAL | CROATIA | 5.000 | | | |

| | | | | | |
|-----------------|----------|---------------------------------|--------|--------|--------------------------|
| | NATIONAL | ESTONIA | 3.500 | | |
| | NATIONAL | FRANCE | 5.000 | | |
| | NATIONAL | GERMANY | 1.250 | | |
| | NATIONAL | GREECE | 10.000 | 10.000 | |
| | NATIONAL | INDONESIA | 5.000 | | |
| | NATIONAL | ICELAND | 3.500 | | |
| | NATIONAL | LITHUANIA | 3.500 | | |
| | NATIONAL | MALAYSIA | 5.000 | 2.000 | |
| | NATIONAL | MEXICO | 5.000 | | Respirable fraction |
| | NATIONAL | NORWAY | 3.000 | | |
| | NATIONAL | PORTUGAL | 5.000 | | |
| | NATIONAL | RUSSIAN FEDERATION | 6.000 | | |
| | NATIONAL | SLOVAKIA | 1.500 | | |
| | NATIONAL | SLOVENIA | 6.000 | | |
| | NATIONAL | SOUTH AFRICA | 5.000 | | Respirable particulate |
| | NATIONAL | SOUTH AFRICA | 10.000 | | Inhalable particulate |
| | NATIONAL | TAIWAN, PROVINCE OF CHINA | 10.000 | | |
| | NATIONAL | HUNGARY | 6.000 | | |
| | ACGIH | NNN | 5 | | (R), A4 - Pneumoconiosis |
| sodium chloride | NATIONAL | LATVIA | 5.000 | | |
| | NATIONAL | LITHUANIA | 5.000 | | |
| | NATIONAL | RUSSIAN FEDERATION | | 5.000 | |

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

N.A.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State: Solid

Colour: Grey

Odour: N.A.

Odour threshold: N.A.

pH: =10.00

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.20 g/cm³

Solubility in water: N.A.

Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Flammability: N.A.
Volatile Organic compounds - VOCs = N.A.

Particle characteristics:

Particle size: N.A.

9.2. Other information

Miscibility: N.A.
Conductivity: N.A.
Evaporation rate: N.A. No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological Information of the Preparation

| | |
|--------------------------------------|--|
| a) acute toxicity | Not classified Based on available data, the classification criteria are not met |
| b) skin corrosion/irritation | Not classified Based on available data, the classification criteria are not met |
| c) serious eye damage/irritation | Not classified Based on available data, the classification criteria are not met |
| d) respiratory or skin sensitisation | Not classified Based on available data, the classification criteria are not met |
| e) germ cell mutagenicity | Not classified Based on available data, the classification criteria are not met |
| f) carcinogenicity | Not classified Based on available data, the classification criteria are not met |
| g) reproductive toxicity | Not classified Based on available data, the classification criteria are not met |
| h) STOT-single exposure | Not classified Based on available data, the classification criteria are not met |
| i) STOT-repeated exposure | Not classified Based on available data, the classification criteria are not met |
| j) aspiration hazard | Not classified Based on available data, the classification criteria are not met |

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration $\geq 0.1\%$

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. Disposal through discharge into wastewater is not permitted

A waste code according to the European List of Wastes (LoW) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

N.A.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

N.A.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2020/878
Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: None.

Restrictions related to the substances contained: 75

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Non-hazardous to waters

SVHC Substances:

No data available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive
DSD: Dangerous Substances Directive
EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: Keep Away From Heat
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.